

REMARKS

Claims 2 and 4-58 are original. Claims 1 and 3 are currently amended. Claims 1-58 are pending for consideration. In view of the following remarks, Applicant respectfully requests reconsideration and withdrawal of the rejections and forwarding of the application on to issuance.

The Claim Rejections

Claims 1-2, 3, 7, 11-17, 19, 22, 24-30, 32, 34, 36-38, 40, 42-47, 49-50, 52-54, and 58 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,493,692 to Theimer et al. (hereinafter, "Theimer").

Applicant respectfully submits that the Office has not established that Theimer anticipates the subject matter recited in each of the claims discussed below.

Claim 1, currently amended, recites a method comprising:

- periodically identifying a location of a first computer that is used by a first computer user and wherein periodically identifying comprises transmitting the location of the first computer to a network server during each of several recurring time periods;
- receiving a request from a computing unit for the location of the first computer user;
- determining the last known location of the first computer;
- transmitting the location of the first computer to the computing unit;
- and
- recognizing the location of the first computer as the location of the first computer user.

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2 The Office addresses the amended language of claim 1 in its rejection of
3 claim 3. In this rejection, the Office asserts that Theimer discloses “periodically
4 identifying a location of the first computer comprises: ... transmitting the location
5 of the first computer ... to a network server during each of several recurring time
6 periods”, relying on column 8, line 59 to column 9, line 1 for support. For the
7 convenience of the Office, this portion of Theimer is provided below:

8
9 One source of location information, as mentioned above, is
10 Tab agents. Tab agents keep track of which cell their associated
11 Tabs are currently in. A Tab agent does this by remembering the last
12 communication packet it receives from its object; all
13 communications packets contain the ID number of the cell they
14 originated in or are being sent to. Agents depend on objects sending
15 communications packets frequently enough so that each agent will
16 know where its associated object currently is, and if appropriate the
17 identity of the user using it.

18 *(Theimer, column 8, line 59 to column 9, line 1.)*
19

20 The portion of Theimer relied upon by the Office in rejecting this subject
21 matter does not disclose “transmitting the location of the first computer to a
22 network server during each of several recurring time periods” as required by
23 amended claim 1.

24 For this reason, Applicant respectfully submits that the Office has not
25 established that Theimer anticipates the subject matter recited in amended claim 1.

1 **Claims 2-15** depend from claim 1. Claims 2, 3, 7, and 11-15 stand rejected
2 under 102 based on Theimer. Applicant submits that the portions of Theimer
3 relied upon in rejecting these dependent claims have not been shown by the Office
4 to provide the deficiency in the Office's argument set forth above.

5 Claims 4-6 stand rejected under 103 based on Theimer in view of U.S.
6 Patent No. 5,781,150 to Norris (hereinafter "Norris"). Norris is relied upon by the
7 Office for GPS and other position-related teachings. Applicant respectfully
8 submits that the portions of Norris recited by the Office in its rejection of claims 4-
9 6 do not provide the deficiency in the Office's argument set forth above.

10 Claims 8-10 stand rejected under 103 based on Theimer in view of U.S.
11 Patent No. 5,659,596 to Dunn (hereinafter "Dunn"). Dunn is relied upon by the
12 Office primarily for time-stamping, time fields, time differentials, time thresholds,
13 and active signal teachings. Applicant respectfully submits that the portions of
14 Dunn recited by the Office in its rejection of claims 8-10 do not provide the
15 deficiency in the Office's argument set forth above.

16 Further, Applicant submits that the Office has improperly combined
17 Theimer with Dunn. Dunn, in summarizing his invention, recites that his invention
18 "provide[s] a mobile network system that locates mobile users and that operates
19 ***completely independent*** of the polling ... schemes." (Dunn, Summary of the
20 Invention, column 8, lines 10-14.) Dunn recites that these polling schemes are a
21 way to track roaming remote subscriber units (e.g., cell phones) by each remote
22 subscriber unit periodically receiving a signal reference. (See Dunn at column 5,
23 lines 1-9). Thus, Dunn recites that his invention provides a mobile network system
24 that locates mobile users ***completely independent*** of periodic polling. Theimer
25 recites performing input monitoring by "periodically poll[ing]" device agents in a

1 system. (Theimer, column 9, lines 35-37.) Based on these cites, Dunn and
2 Theimer appear to teach away from combining the two. Applicant does not need
3 to interpret Theimer, however, as the Office relies on this portion of Theimer in
4 arguing that Theimer discloses “periodically identifying a location”, as required by
5 claim 1 on which claims 8-10 rely. Thus, the Office’s combination of Dunn with
6 Theimer and its interpretation of Theimer are inconsistent. The Office has, in
7 effect, rejected subject matter of claim 1 based on an interpretation of Theimer that
8 precludes combination with Dunn. The Office cannot then properly combine
9 Theimer with Dunn to reject subject matter of claims that depend on claim 1.

10 Applicant respectfully submits that the Office has either improperly
11 interpreted Theimer or combined Theimer with Dunn, thereby failing to establish a
12 *prima facie* case of obviousness under 103.

13 **Claim 16**, recites a method comprising:

- 14 • determining a location of a computing unit;
- 15 • periodically transmitting, from the computing unit, the location of
16 the computing unit to a network server together with a user name of
17 a user using the computing unit; and
- 18 • including an active signal with the periodically transmitted
19 information when the user is actively using the computing unit.

20
21 The Office rejects claim 16 under §102 based on Theimer. In this rejection,
22 the Office asserts that Theimer discloses “including an active signal with the
23 periodically transmitted information when the user is actively using the computing
24 unit”, relying on column 9, lines 26-37 for support. For the convenience of the
25 Office, this portion of Theimer is provided below:

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2 Input Monitor Service 86 is similar to Badge Service 84,
3 except that it keeps track of individuals via the device or devices
4 they use to make inputs to the system. Thus, in an area not equipped
5 with a Badge detection system as previously described, a user may
6 still be located by reference to the last terminal where an input was
7 made. The input monitor service requires the ability to monitor
8 activity on the various input devices of a system. In the present
9 embodiment, the Input Monitor monitors workstation input by
10 periodically polling each workstation in the system. Another way to
11 perform input monitoring is to periodically poll all the relevant
12 device agents in a system.

13 *(Theimer, column 9, lines 26-37.)*
14

15 The portion of Theimer relied upon by the Office in rejecting claim 16 does
16 not disclose “including an active signal with the periodically transmitted
17 information when the user is actively using the computing unit” as required by
18 claim 16. This portion of Theimer makes no mention whatsoever of including an
19 active signal, whether with periodically transmitted information or otherwise.

20 For at least this reason, Applicant respectfully submits that the Office has
21 not established that Theimer anticipates the subject matter recited in claim 16.

22 **Claims 17-27** depend from claim 16. Claims 17, 19, 22, and 24-27 stand
23 rejected under §102 based on Theimer. Applicant submits that the portions of
24 Theimer relied upon in rejecting these dependent claims have not been shown by
25 the Office to disclose the deficiency in the Office’s rejection of claim 16, on which

1 these claims depend. For this reason, Applicant asserts that the Office has failed to
2 establish that claims 17, 19, 22, and 24-27 are anticipated by Theimer.

3 Claims 20, 21, and 23 stand rejected under §103 based on Theimer in view
4 of Norris. Norris is relied upon by the Office for GPS and other position-related
5 teachings. Applicant respectfully submits that the portions of Norris recited by the
6 Office in its rejection of claims 20, 21, and 23 do not provide the deficiency in the
7 Office's rejection of claim 16, on which these claims depend. For at least this
8 reason, Applicant respectfully submits that the Office has failed to establish a
9 *prima facie* case of obviousness under §103.

10 Claim 18 stands rejected under §103 based on Theimer in view of Dunn.
11 Applicant submits that the Office has improperly combined Theimer with Dunn.
12 Similarly to as set forth above, the Office relies on an interpretation of Theimer in
13 rejecting claim 16, on which claim 18 depends, that is inconsistent with combining
14 Theimer with Dunn.

15 For at least this reason, Applicant respectfully submits that the Office has
16 either improperly interpreted Theimer in rejecting claim 16 or combined Theimer
17 with Dunn in rejecting claim 18, thereby failing to establish a *prima facie* case of
18 obviousness under §103.

19 **Claim 28** recites a system comprising:

- 20 • a server having memory;
- 21 • a user database stored in the memory of the server, the user database
22 containing a user field for storing a user name of a mobile computer
23 user, and a last known location field for storing a most recent
24 location of a computer user identified in a corresponding user field;

- 1 • a wireless access point configured to receive network transmissions
- 2 from one or more mobile computers;
- 3 • a mobile computer having memory and a wireless network interface
- 4 for communication with the wireless access point;
- 5 • a location tracking system in the mobile computer memory
- 6 configured to determine a location of the mobile computer;
- 7 • a location manager in the mobile computer memory configured to
- 8 periodically transmit the location of the mobile computer and the
- 9 user name of a mobile computer user to the server via the wireless
- 10 network interface; and
- 11 • a computing unit having a computing unit location manager
- 12 configured to search the user database of the server to determine
- 13 information regarding the location of a mobile user.
- 14

15 The Office rejects claim 28 under §102 based on Theimer. In this rejection,
16 the Office asserts that Theimer discloses “the user database containing a user field
17 for storing a user name of a mobile computer user, and a last known location field
18 for storing a most recent location of a computer user identified in a corresponding
19 user field”, relying on column 7, line 61 to column 8, line 11 for support.

20 The portion of Theimer relied upon by the Office in rejecting this subject
21 matter of claim 28 does not disclose “the user database containing *a user field*” or
22 “*a last known location field* for storing a most recent location of a computer user
23 *identified in a corresponding user field*”. This portion of Theimer makes no
24 mention whatsoever of a user field or a last known location field.

25 For at least this reason, Applicant respectfully submits that the Office has

1 not established that Theimer anticipates the subject matter recited in claim 28.

2 Also in this rejection, the Office asserts that Theimer discloses "a location
3 manager in the mobile computer memory configured to periodically transmit the
4 location of the mobile computer and the user name of a mobile computer user to
5 the server via the wireless network interface", relying on column 8, lines 48-55 and
6 column 6, lines 28-45 for support. For the convenience of the Office, these
7 portions of Theimer are provided below:

8
9 Location information sources could include sighting
10 information from the Active Badges, from the Tab agents of the
11 Tabs the user is currently carrying, from monitoring the input activity
12 on various computer terminals, and from a variety of other sources.
13 For example, the user might be carrying a portable global positioning
14 system whose output can be attached to a portable
15 computing/communication device so that the user's current
16 location...

17 *(Theimer, column 8, lines 48-55.)*
18

19 Tabs 26 and Pads 24 are mobile units that connect with the
20 network through the wireless media. Boards 28 may also provide a
21 means for computer system communications. A user 30 may further
22 have on an Active Badge 32. Tab 26 is a small stylus-based mobile
23 computer. Tab 26 may be carried by a user 30 throughout the
24 workplace, may be assigned to a particular user, and further may
25 identify that user to sensing devices. Functionally, Tab 26 may be a

1 simple device. Speed and memory capacity requirements are very
2 modest, thus enabling these devices to be very small and consume
3 little power. As a result, Tabs 26 are very portable. Clearly, other
4 devices, including other mobile devices, with at least the ability to
5 perform simple communications with the system and to interact with
6 the user and display messages may be used to perform the techniques
7 herein described, as well. Pads, for example, may be used and, being
8 more powerful, may further provide additional applications
9 capabilities to the user.

10 *(Theimer, column 6, lines 28-45.)*

11
12 These portions of Theimer relied upon by the Office in rejecting claim 28
13 do not disclose “a location manager in the mobile computer memory configured to
14 periodically transmit the location of the mobile computer and the user name of a
15 mobile computer user to the server via the wireless network interface” as required
16 by claim 28. These portions of Theimer make no mention whatsoever of a location
17 manager configured to *periodically* transmit information.

18 Also for this reason, Applicant respectfully submits that the Office has not
19 established that Theimer anticipates the subject matter recited in claim 28.

20 **Claims 29-39** depend from claim 28. Claims 29, 30, 32, 34, and 36-38
21 stand rejected under §102 based on Theimer. Applicant submits that the portions
22 of Theimer relied upon in rejecting these dependent claims have not been shown
23 by the Office to disclose the deficiencies in the Office’s rejection of claim 28, on
24 which these claims depend. For this reason, Applicant asserts that the Office has
25 failed to establish that claims 29, 30, 32, 34, and 36-38 are anticipated by Theimer.

1 Claims 33 and 35 stand rejected under §103 based on Theimer in view of
2 Norris. Norris is relied upon by the Office for GPS and other position-related
3 teachings. Applicant respectfully submits that the portions of Norris recited by the
4 Office in its rejection of claims 33 and 35 do not provide the deficiencies in the
5 Office's rejection of claim 28, on which these claims depend. For at least this
6 reason, Applicant respectfully submits that the Office has failed to establish a
7 *prima facie* case of obviousness under §103.

8 Claims 31 and 39 stand rejected under §103 based on Theimer in view of
9 Dunn. Applicant submits that the Office has improperly combined Theimer with
10 Dunn. Similarly to as set forth above, the Office relies on an interpretation of
11 Theimer in rejecting claim 28, on which claims 31 and 39 depend, that is
12 inconsistent with combining Theimer with Dunn.

13 For at least this reason, Applicant respectfully submits that the Office has
14 either improperly interpreted Theimer in rejecting claim 28 or combined Theimer
15 with Dunn in rejecting claims 31 and 39, thereby failing to establish a *prima facie*
16 case of obviousness under §103.

17 **Claim 40** recites a network server comprising:

- 18 • memory;
- 19 • a user database stored in the memory containing one or more records,
20 each record including:
 - 21 ▪ a user field in the user database to store a user
22 identifier; and
 - 23 ▪ a last known location field in the user database to store
24 a most recent location identified for the corresponding
25 user field.

1
2 The Office rejects claim 40 under §102 based on Theimer. In this rejection,
3 the Office asserts that Theimer discloses “each record including: a user field in the
4 user database to store a user identifier; and a last known location field in the user
5 database to store a most recent location identified for the corresponding user
6 field”, relying on column 7, line 61 to column 8, line 11 for support.

7 As set forth similarly above, this portion of Theimer relied upon by the
8 Office does not disclose “*a user field* in the user database to store a user identifier;
9 and *a last known location field* in the user database to store a most recent location
10 *identified for the corresponding user field*”. For at least this reason, Applicant
11 respectfully submits that the Office has not established that Theimer anticipates the
12 subject matter recited in claim 40.

13 **Claims 41-44** depend from claim 40. Claims 42-44 stand rejected under
14 §102 based on Theimer. Applicant submits that the portions of Theimer relied
15 upon in rejecting these dependent claims have not been shown by the Office to
16 disclose the deficiency in the Office’s rejection of claim 40, on which these claims
17 depend. For this reason, Applicant asserts that the Office has failed to establish
18 that claims 42-44 are anticipated by Theimer.

19 Claim 41 stands rejected under §103 based on Theimer in view of Dunn.
20 Applicant submits that the Office has improperly combined Theimer with Dunn.
21 Similarly to as set forth above, the Office relies on an interpretation of Theimer in
22 rejecting other claims of the present application that is inconsistent with combining
23 Theimer with Dunn.

24 For at least this reason, Applicant respectfully submits that the Office has
25 either improperly interpreted Theimer in rejecting numerous other claims of the

1 present application or combined Theimer with Dunn in rejecting claim 41, thereby
2 failing to establish a *prima facie* case of obviousness under §103.

3 **Claim 45** recites a mobile computing unit, comprising:

- 4 • memory;
- 5 • a wireless network interface configured to connect the mobile
6 computing unit to a wireless access point of a remote server;
- 7 • a location tracking service configured to determine a location of the
8 mobile computer unit; and
- 9 • a location manager configured to periodically transmit the location of
10 the mobile computing unit to the remote server via the wireless
11 network interface.

12
13 The Office rejects claim 45 under §102 based on Theimer. In this rejection,
14 the Office asserts that Theimer discloses “a location manager configured to
15 periodically transmit the location of the mobile computing unit to the remote server
16 via the wireless network interface”, relying on column 8, line 64 to column 9, line
17 6 for support. For the convenience of the Office, this portion of Theimer is
18 provided below:

19
20 Agents depend on objects sending communications packets
21 frequently enough so that each agent will know where its associated
22 object currently is, and if appropriate the identity of the user using it.
23 If the agent sends a packet to the wrong cell (e.g., because the object
24 has since moved), then it will get no response back and will
25 eventually try to resend the packet. In the meantime, the mobile

1 device should have generated a beacon or a regular communications
2 packet, including information of its new location.

3 *(Theimer, column 8, line 64 to column 9, line 6.)*
4

5 This portion of Theimer does not disclose a location manager configured to
6 *periodically* transmit the location of the mobile computing unit to the remote
7 server via the wireless network interface. This portion of Theimer arguably
8 discloses sending communications frequently enough so that each agent will know
9 where its associated object currently is. But this frequency has not been
10 established by the Office to disclose periodic transmission. For at least this reason,
11 Applicant respectfully submits that the Office has not established that Theimer
12 anticipates the subject matter recited in claim 45.

13 **Claims 46-54** depend from claim 45. Claims 46, 47, 49, 50, and 52-54
14 stand rejected under §102 based on Theimer. Applicant submits that the portions
15 of Theimer relied upon in rejecting these dependent claims have not been shown
16 by the Office to disclose the deficiency in the Office's rejection of claim 45, on
17 which these claims depend. For this reason, Applicant asserts that the Office has
18 failed to establish that claims 46, 47, 49, 50, and 52-54 are anticipated by Theimer.

19 Claim 48 stands rejected under §103 based on Theimer in view of Dunn.
20 Applicant submits that the Office has improperly combined Theimer with Dunn.
21 Similarly to as set forth above, the Office relies on an interpretation of Theimer in
22 rejecting numerous claims of the present application, including claim 45 on which
23 claim 48 depends, that is inconsistent with combining Theimer with Dunn.
24 Applicant respectfully submits that the Office has either improperly interpreted
25

1 Theimer in rejecting claim 45 or combined Theimer with Dunn in rejecting claim
2 48, thereby failing to establish a *prima facie* case of obviousness under §103.

3 Claim 51 stands rejected under §103 based on Theimer in view of Norris.
4 Norris is relied upon by the Office for GPS and other position-related teachings.
5 Applicant respectfully submits that the portions of Norris recited by the Office in
6 its rejection of claim 51 do not provide the deficiency in the Office's rejection of
7 claim 45, on which this claim depends. For at least this reason, Applicant
8 respectfully submits that the Office has failed to establish a *prima facie* case of
9 obviousness under §103.

10 **Claim 55** recites a method for locating a mobile computer user in a wireless
11 network, comprising:

- 12 • periodically identifying a location of a mobile computer that is used
13 by a mobile user and associating a time stamp with the location
14 indicating a time at which the location was identified;
- 15 • transmitting the location of the mobile computer to a network server
16 together with the time stamp and a name of the mobile user;
- 17 • storing the transmitted information on the network server;
- 18 • receiving a request from a computing unit for the location of the
19 mobile user;
- 20 • determining the last known location of the mobile computer by
21 accessing the network server and finding the location having a most
22 recent time stamp; and
- 23 • recognizing the last known location of the mobile computer as the
24 location of the mobile user.

1 The Office rejects claim 55 under §103 based on Theimer in view of Dunn.
2 Applicant submits that the Office has improperly combined Theimer with Dunn.
3 Dunn recites that his invention provides a mobile network system that locates
4 mobile users *completely independent* of periodic polling. Dunn also recites that
5 these polling schemes are a way to track roaming remote subscriber units (e.g., cell
6 phones) by each remote subscriber unit periodically receiving a signal reference.
7 Thus, Dunn recites that his invention provides a mobile network system that
8 locates mobiles users completely independent of schemes that track a roaming
9 subscriber unit by each unit periodically receiving a signal reference.

10 The Office argues that Theimer discloses “periodically identifying a
11 location of a mobile computer” in rejecting claim 55. Thus, the Office’s
12 combination of Dunn with Theimer and its argued interpretation of Theimer are
13 inconsistent. The Office has, in effect, rejected subject matter of claim 55 based
14 on an interpretation of Theimer that precludes combination with Dunn.

15 Applicant respectfully submits that the Office has either improperly
16 interpreted Theimer or combined Theimer with Dunn, thereby failing to establish a
17 *prima facie* case of obviousness under 103 in its rejection of claim 55.

18 **Claims 56 and 57** depend from claim 55 and are allowable by virtue of this
19 dependency.

20 **Claim 58** recites a system, comprising:

- 21 • a server having memory;
- 22 • a user database stored in the memory of the server, the user database
23 containing a user field for storing a user name of a mobile computer
24 user, and a last known location field for storing a most recent
25 location of a computer user identified in a corresponding user field;

- 1 • a wireless access point configured to receive network transmissions
- 2 from one or more mobile computers;
- 3 • a mobile computer having memory and a wireless network interface
- 4 for communication with the wireless access point;
- 5 • a location tracking system in the mobile computer memory
- 6 configured to determine a location of the mobile computer;
- 7 • a location manager in the mobile computer memory configured to
- 8 transmit the location of the mobile computer and the user name of a
- 9 mobile computer user to the server via the wireless network interface
- 10 when a request to do so is received from the server; and
- 11 • a computing unit having a computing unit location manager
- 12 configured to search the user database of the server to determine
- 13 information regarding the location of a mobile user.
- 14

15 The Office rejects claim 58 under §102 based on Theimer. Claim 58 recites
16 similar limitations as claim 28. For the reasons given above with respect to claim
17 28, Applicant respectfully submits that the Office has not established that Theimer
18 anticipates the subject matter recited in claim 58.

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